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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,018	05/15/2001	David Frank	9351-60	8005

1059 7590 03/31/2003

BERESKIN AND PARR
SCOTIA PLAZA
40 KING STREET WEST-SUITE 4000 BOX 401
TORONTO, ON M5H 3Y2
CANADA

EXAMINER

TSANG FOSTER, SUSY N

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 03/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/855,018

Applicant(s)

FRANK ET AL.

Examiner

Susy N Tsang-Foster

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed on 9/28/2001 and 8/14/2002 have been considered by the Examiner.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: On page 12, paragraph 63 mentions reference labels 162, 164, and 166 which do not appear to be in Figure 8. Paragraph 63 also appears to contradict the brief description of drawings for Figure 8 which states that Figure 8 is a cathode bipolar flow field plate, not the anode flow field plate. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: On page 13, paragraph 66 states that Figure 8 has reference labels 182, 184, and 186 which are not shown. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities:

On page 9, line 17, the serial number of the application is missing.

On page 10, paragraph 50 states that Figure 5 shows one fuel cell but a fuel cell is not shown in Figure 5.

On page 15, line 31, the serial number of the application is missing.

On page 16, line 16, the serial number of the application is missing.

On page 17, line 1, the serial number of the application is missing.

The reference labels in the specification are very confusing and often do not seem to correspond to the Figures being mentioned. It is recommended to the applicants to review the specification and drawings and make any corrections to the reference labels in the specification and/or Figures in order to clarify applicants' invention.

Appropriate correction is required.

5. The abstract of the disclosure is objected to because it is unclear. For example, the sentence beginning with "The enables sealing surfaces..." is confusing as it is unclear what enables. It is also unclear what aperture extensions are. Correction is required. See MPEP § 608.01(b).

Claim Objections

6. Claims 1, 5, 8, and 9 are objected to because of the following informalities:

Art Unit: 1745

In claim 1, "reaction action gas" should be "reaction gas".

In claim 5, the claim should start with a capital letter.

In claim 5, "disclaimed" should be "claimed".

In claim 8, "site" should be "side".

In claim 9, "front sides" should be "front side".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In general, the claims are very unclear.

In claim 1, the limitation "with a complementary flow field plate" is indefinite because it is unclear if the flow field plate has a flow field or this limitation is referring to another flow field plate.

In claim 1, the limitation "for each of the apertures, an aperture extension extending on the rear side of the flow field plate" is indefinite because it is unclear how an aperture has an extension.

Art Unit: 1745

In claim 1, the limitation “for each of the apertures, at least one slot extending through the flow field plate from the back side to the front side” is indefinite because it unclear how an aperture has at least one slot when an aperture is an opening.

Similarly, in claim 3, it is unclear how each aperture has a plurality of slots. As evidenced claim 4, the slots and apertures are separate.

In claim 9, the limitation “aperture extension” is indefinite because it is unclear how an aperture can have an extension.

Claims depending from claims rejected under 35 USC 112, second paragraph are also rejected for the same.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. As best understood, claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Washington et al. (US 5,750,281).

Washington et al. disclose a fuel cell assembly (Figure 1) comprising at least one fuel cell wherein each fuel cell comprises first and second complementary flow field plates to define a fuel cell chamber containing a membrane electrode assembly (col. 10, lines 33-55), each of the flow field plates comprising at least two first apertures for a first reactant gas and at least two second apertures for a second reactant gas (see Figures 14 and 15; col. 9, lines 40-58) and first slots (channels) extending from the first reactant gas flow channels to the rear side of the flow

Art Unit: 1745

field plate and second slots (channels) extending from the second reactant flow channels to the rear side of the flow field plate and aperture extensions (tubes) for each of the flow field plates that provide communication between the apertures and the slots (see Figure 9 and col. 9, lines 11-19).

Double Patenting

11. As best understood, claims 1-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13, 16, and 35 of copending Application No. 10/109,002. Although the conflicting claims are not identical, they are not patentably distinct from each other because copending claims 13, 16, and 35 anticipate and contain all the limitations of claims 1-9 of the present application. Specifically, the instant claims 1-9 are broader than the copending claims 13, 16, and 35.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

12. Any inquiry concerning this communication or earlier communications should be directed to examiner Susy Tsang-Foster, Ph.D. whose telephone number is (703) 305-0588. The examiner can normally be reached on Monday through Thursday from 9:30 AM to 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached at (703) 308-2383. The phone number for the organization where this application or proceeding is assigned is (703) 305-5900.

Art Unit: 1745

The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9310 for regular communications and (703) 872-9311 for After-Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

st/24 March 2003

A handwritten signature in cursive script, appearing to read "Susan L. Foster".